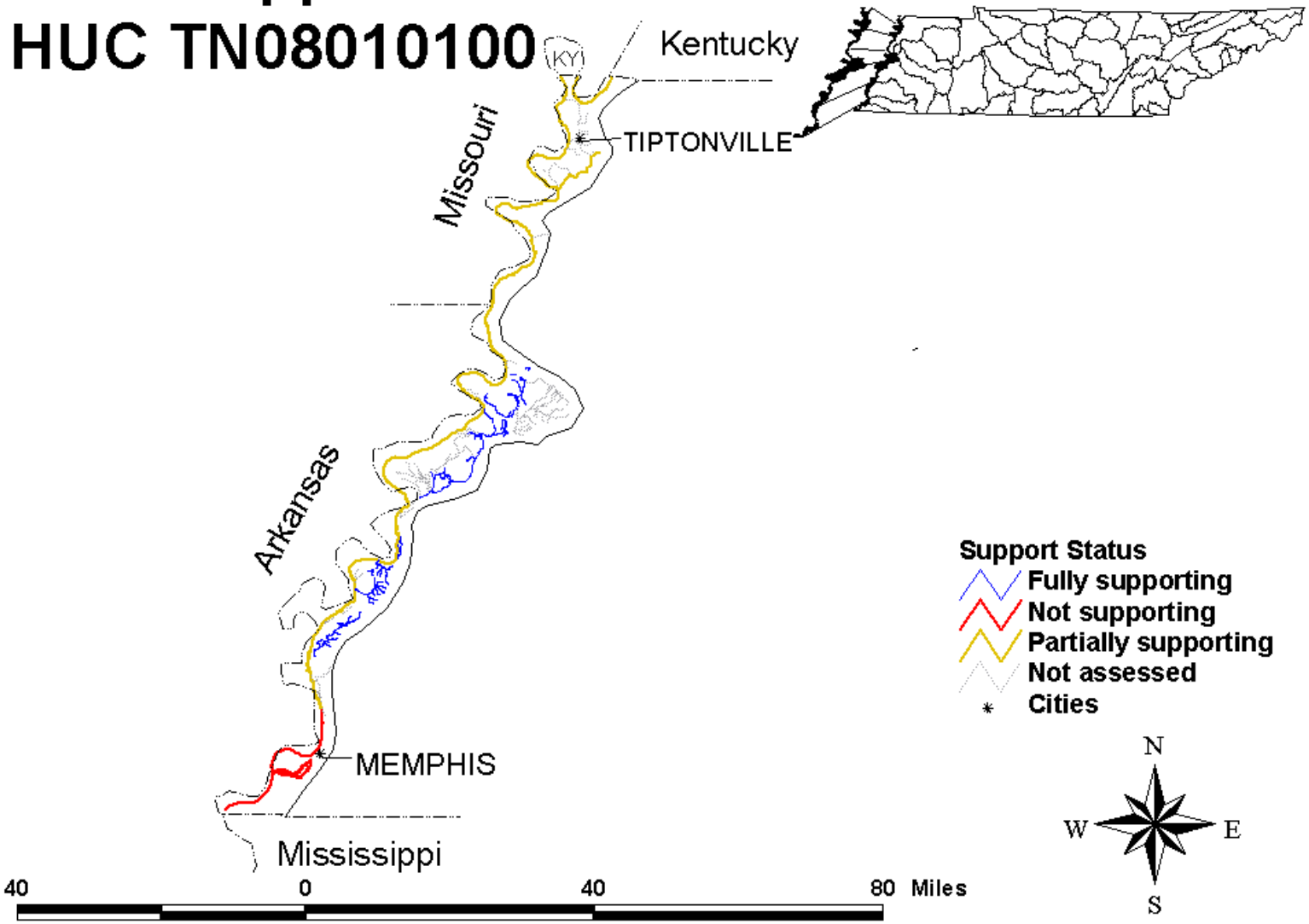
Mississippi River Watershed
HUC TN08010100



Mississippi River Watershed Atlas

HUC Code: **TN08010100**

Counties: Dyer
Lake
Lauderdale
Shelby
Tipton

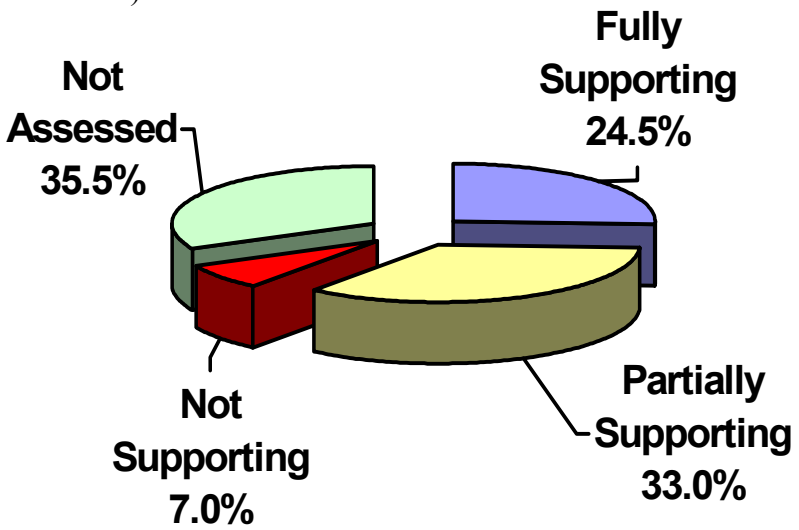
Ecoregions: 73a 74a

Drainage Size of Watershed:	598 square miles
Stream Miles in Watershed:	542.9
Stream Miles Fully Supporting:	133.1
Stream Miles Partially Supporting:	179.2
Stream Miles Not Supporting:	37.9
Stream Miles Not Assessed:	192.7
Lake Acres in Watershed:	125
Lake Acres Not Supporting:	125 (100%)
TDEC Monitoring Stations:	32
Advisories:	2
Watershed Monitoring Group:	5

Surface Water Quality in Mississippi River Watershed

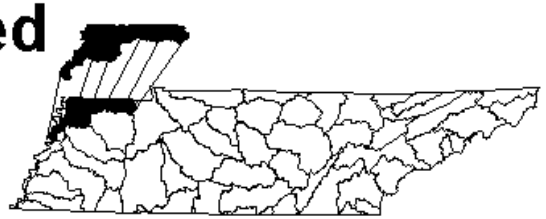
The portion of the river bordering Tennessee is defined as the Lower Mississippi-Memphis segment by USGS. Only 38 percent of assessed stream miles in this watershed are fully supporting. The mainstem Mississippi River is considered impacted by a variety of pollutants. Agricultural activities and sources in other states are the principal pollution sources upstream of Shelby County. The river near Memphis is not supporting due to contaminated sediment.

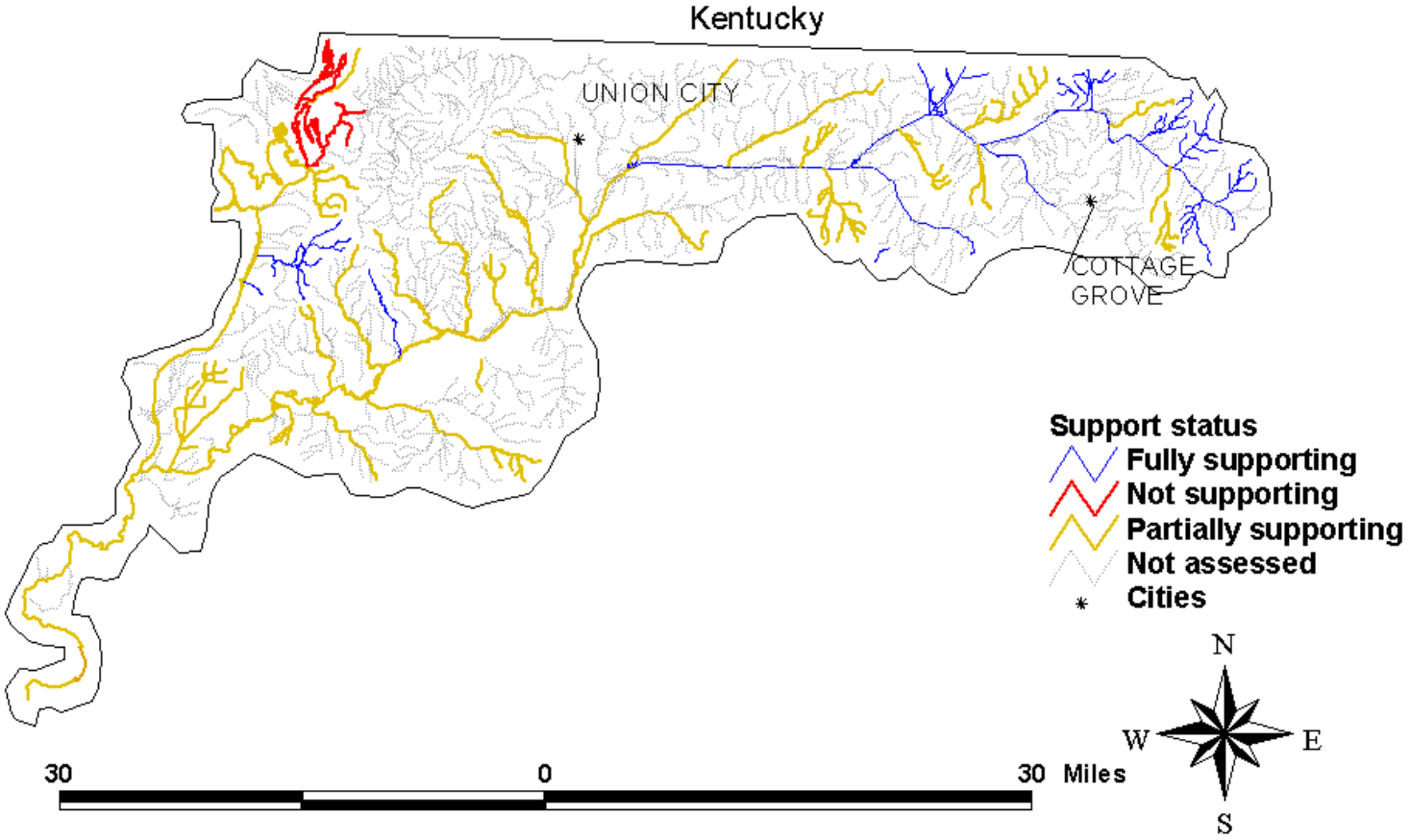
Three high quality streams are subecoregion reference sites, Cold Creek and Middle Fork of the Forked Deer River in 73a (Northern Mississippi Alluvial Plain) and Sugar Creek in 74a (Bluff Hills).



2002 Assessment of Rivers and Streams in Mississippi River Watershed

Lower Obion River Watershed
HUC TN08010202





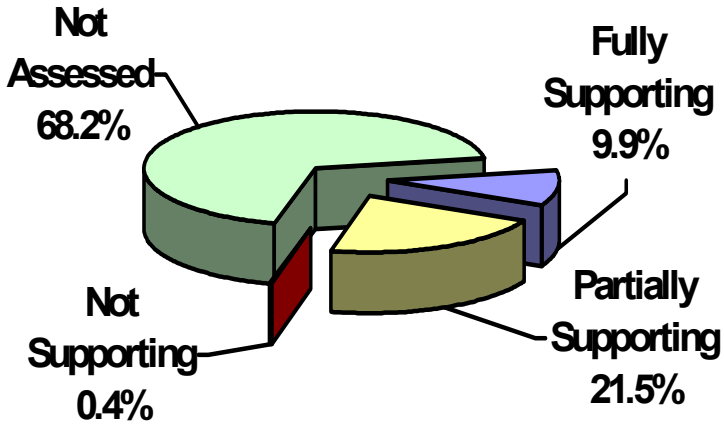
Lower Obion River Watershed Atlas

HUC Code:	**TN08010202**	
Counties:	Dyer	Gibson
	Henry	Lake
	Obion	Weakley
Ecoregions:	65e	73a
	74a	74b
Drainage Size of Watershed:	1140 square miles	
Stream Miles in Watershed:	1,744.4	
Stream Miles Fully Supporting:	173.4	
Stream Miles Partially Supporting:	375.1	
Stream Miles Not Supporting:	8.0	
Stream Miles Not Assessed:	1,187.9	
Lake Acres in Watershed:	15,500	
Lake Acres Partially Supporting:	10,950 (70.6%)	
Lake Acres Not Supporting:	4,550 (29.4%)	
TDEC Monitoring Stations:	87	
Non-TDEC Monitoring Stations:	1	
Advisories:	None	
Watershed Monitoring Group:	5	

Surface Water Quality in Lower Obion River Watershed (including Reelfoot Lake)

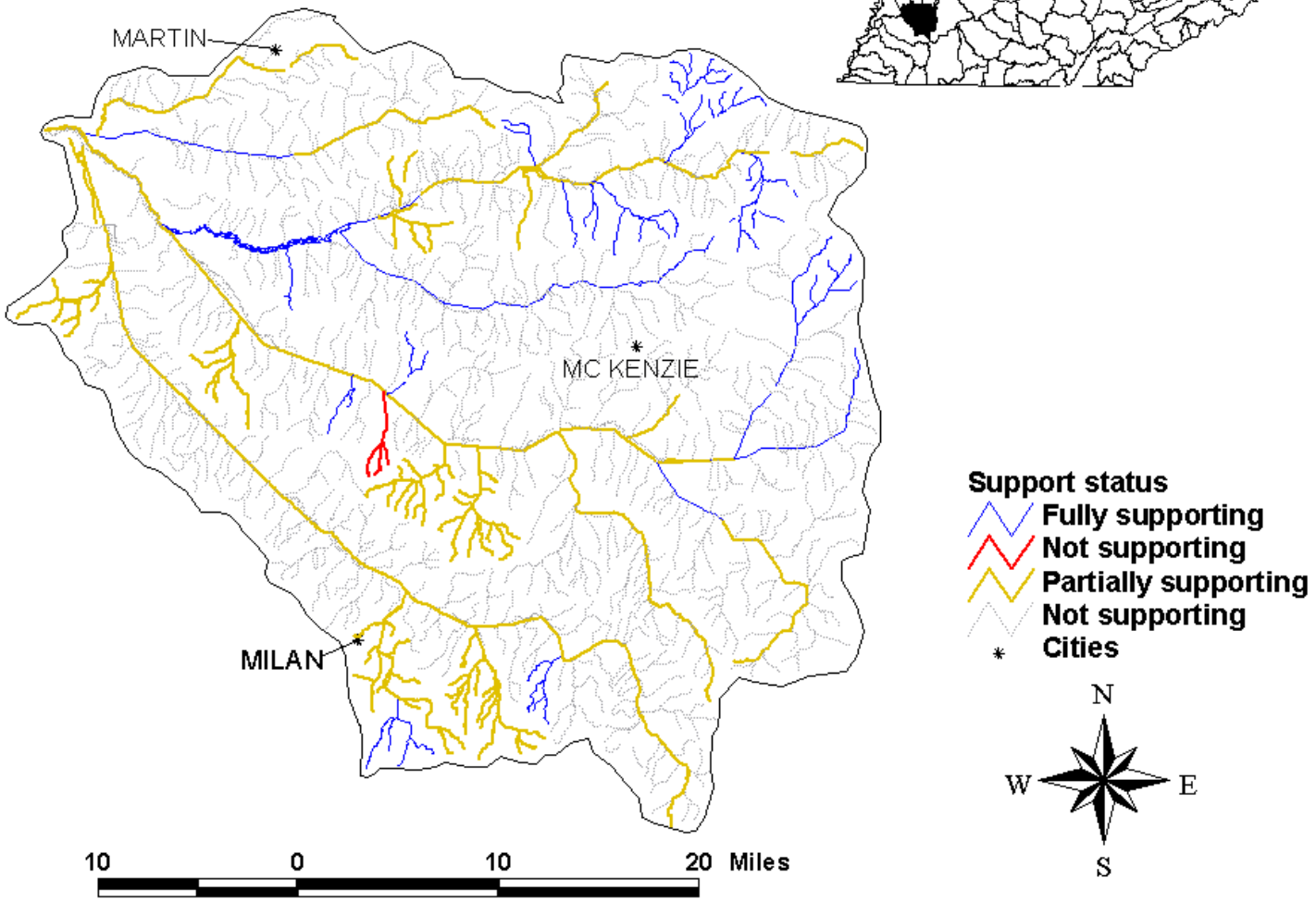
About 87 percent of the Lower Obion River Watershed is in Tennessee with the remainder in Kentucky. Row crops including corn, cotton, and soybeans are widespread. The percent of monitored streams doubled from 16 percent in 2000 to 32 percent. Only 31 percent of surveyed streams were fully supporting with crop runoff and channelization the most widespread pollution sources. Reelfoot Lake is impaired due to accelerated eutrophication.

Reelfoot, the largest natural lake in Tennessee, is an ONRW due to recreational, scenic, and unique ecological values. Four high quality streams are subecoregion reference sites, Bayou du Chien in 73a (Northern Mississippi Alluvial Plain), Pawpaw Creek in 74a (Bluff Hills), and Terrapin and Powell Creeks in 74b (Loess Plains).



2002 Assessment of Rivers and Streams in Lower Obion River Watershed

South Fork Obion River Watershed
HUC TN08010203



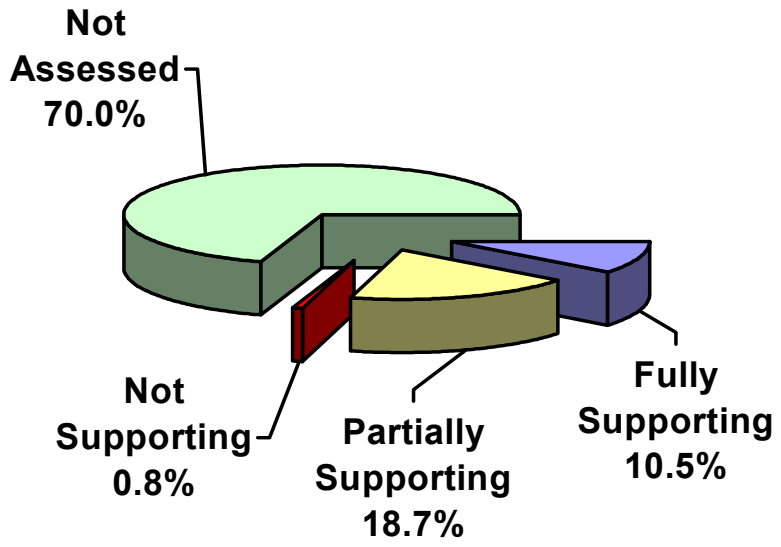
South Fork Obion River Watershed Atlas

HUC Code:	**TN08010203**	
Counties:	Carroll	Gibson
	Henderson	Henry
	Obion	Weakley
Ecoregions:	65e	
	74b	
Drainage Size of Watershed:	1150 square miles	
Stream Miles in Watershed:	1,840.5	
Stream Miles Fully Supporting:	194.1	
Stream Miles Partially Supporting:	343.8	
Stream Miles Not Supporting:	13.9	
Stream Miles Not Assessed:	1,288.7	
Lake Acres in Watershed:	None	
TDEC Monitoring Stations:	70	
Non-TDEC Monitoring Stations:	1	
Advisories:	None	
Watershed Monitoring Group:	5	

Surface Water Quality in South Fork Obion River Watershed

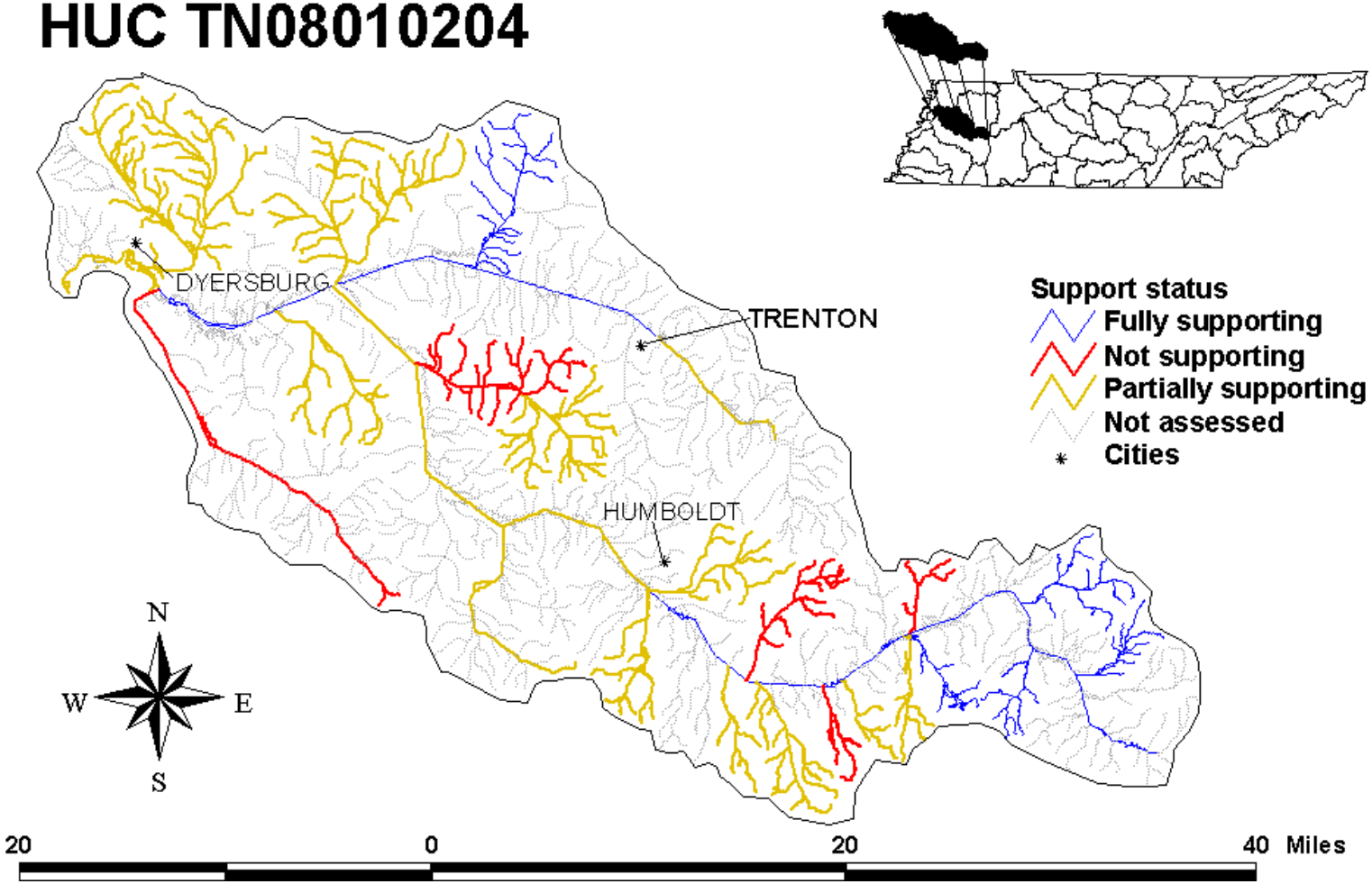
The entire watershed is in Tennessee. Like many west Tennessee streams, the South and Rutherford forks of the Obion River have been extensively channelized, causing siltation and habitat problems. Runoff from row crops is another significant pollution source.

The percentage of stream assessments doubled from 15 percent in 2000 to 30 percent. Thirty-five percent of assessed streams are fully supporting.



2002 Assessment of Rivers and Streams in South Fork Obion River Watershed

North Fork Forked Deer River Watershed (including Middle Fork Forked Deer River) HUC TN08010204



North Fork Forked Deer River Watershed Atlas

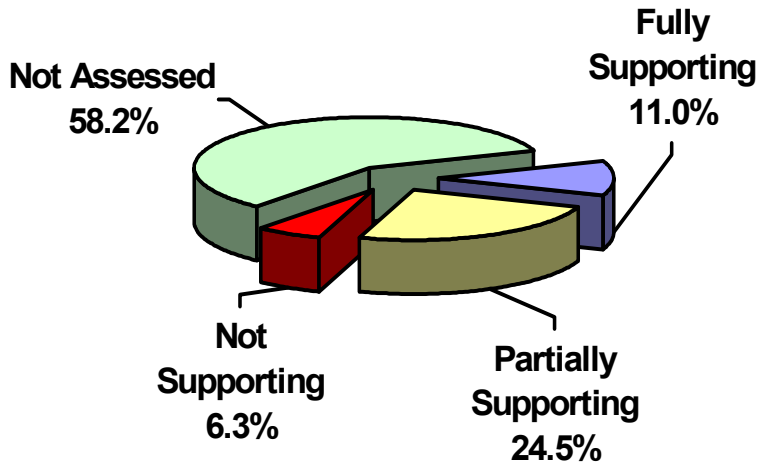
HUC Code:	**TN08010204**	
Counties:	Carroll	Crockett
	Dyer	Gibson
	Henderson	Madison
Ecoregions:	65e	74a
	74b	
Drainage Size of Watershed:	962 square miles	
Stream Miles in Watershed:	1,716.4	
Stream Miles Fully Supporting:	188.7	
Stream Miles Partially Supporting:	420.4	
Stream Miles Not Supporting:	108.8	
Stream Miles Not Assessed:	998.5	
Lake Acres in Watershed:	87	
Lake Acres Not Supporting:	87 (100%)	
TDEC Monitoring Stations:	75	
Advisories:	None	
Watershed Monitoring Group:	2	

Surface Water Quality in North Fork Forked Deer River Watershed (including Middle Fork Forked Deer River)

The entire watershed is in Tennessee. Like other streams in the western portion of the state, many of the streams in this watershed have been extensively channelized. Row crops, especially cotton, are the principle land use.

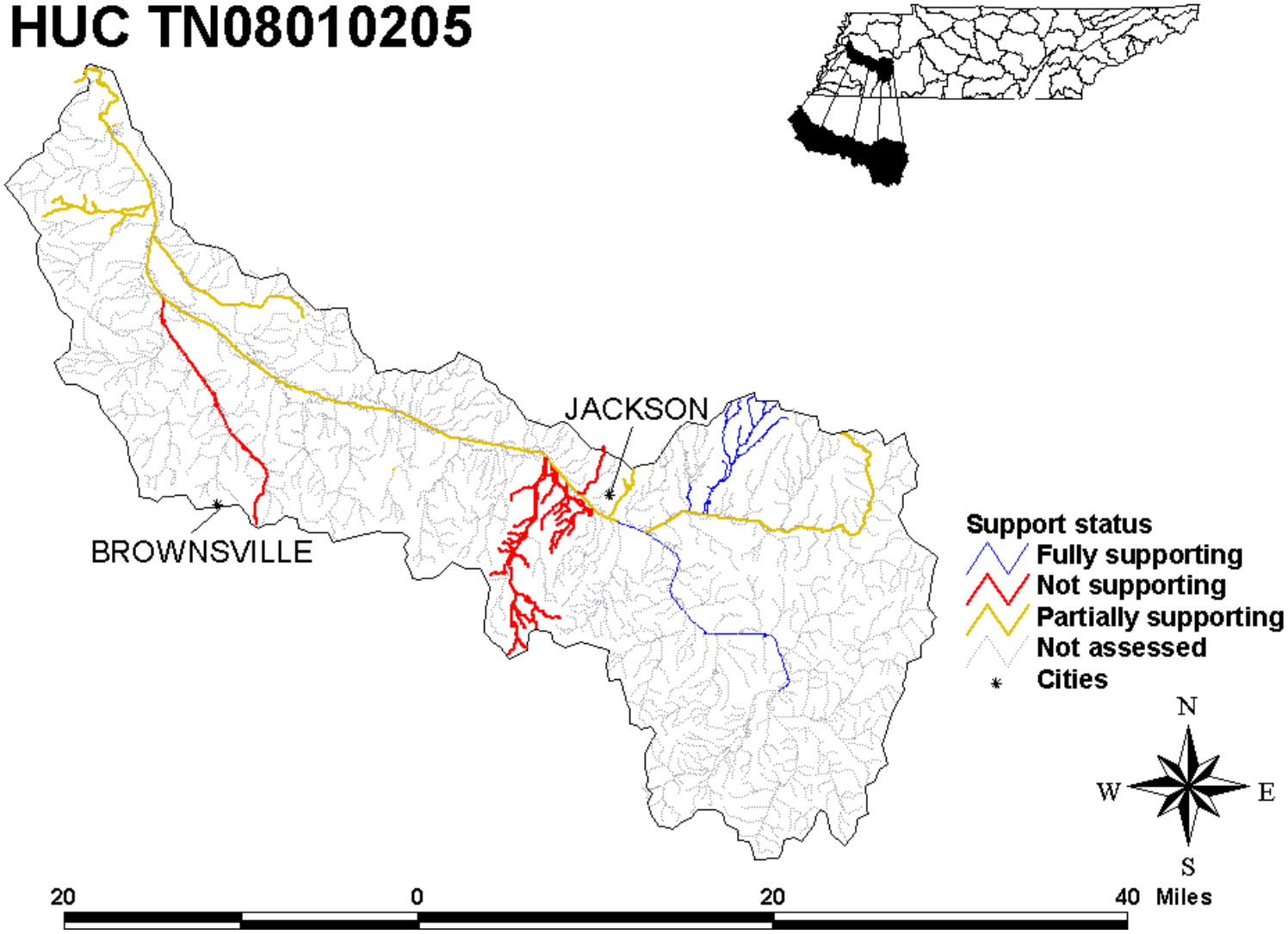
Only 26 percent of assessed stream miles are fully supporting. Siltation, nutrients and habitat alteration are the primary pollutants. Pathogen TMDLs on eight streams (220 stream miles) have been developed and approved by EPA.

One high quality stream is a subecoregion reference site, Griffin Creek in 65e (Southeastern Plains and Hills).



2002 Assessment of Rivers and Streams in North Fork Forked Deer River Watershed

South Fork Forked Deer River Watershed
HUC TN08010205



South Fork Forked Deer River Watershed Atlas

HUC Code: **TN08010205**

Counties:	Chester	Crockett
	Dyer	Haywood
	Henderson	Lauderdale
	Madison	McNairy
Ecoregions:	65e	73a
	74a	74b

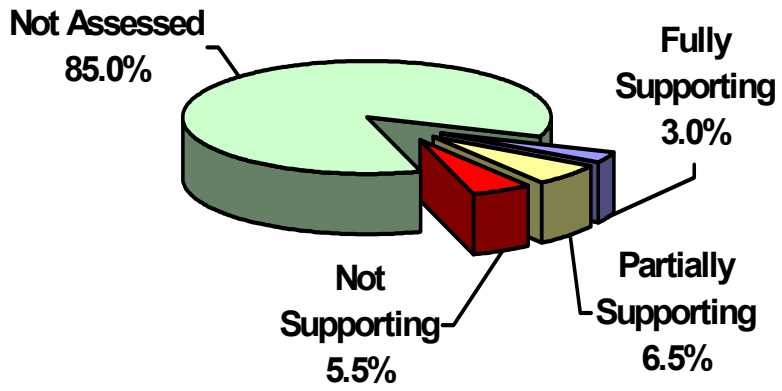
Drainage Size of Watershed:	1,062 square miles
Stream Miles in Watershed:	1,779.9
Stream Miles Fully Supporting:	53.6
Stream Miles Partially Supporting:	115.4
Stream Miles Not Supporting:	97.4
Stream Miles Not Assessed:	1,513.5
Lake Acres in Watershed:	570
Lake Acres Not Assessed:	570 (100%)
TDEC Monitoring Stations:	37
Non-TDEC Monitoring Station:	1
Advisories:	None
Watershed Monitoring Group:	1

Surface Water Quality in South Fork Forked Deer River Watershed

The entire watershed is in Tennessee. As is common in the western portion of the state, streams in this watershed have been extensively channelized. Twenty percent of assessed stream miles are not fully supporting. Siltation, nutrients and habitat alteration are the most prevalent pollutants.

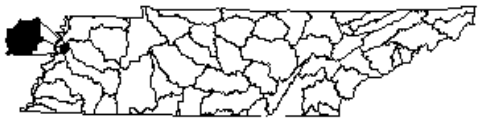
Due to limited data, 85 percent of streams have not been assessed. Additional field surveys have recently been completed and should provide a more comprehensive assessment in 2004. EPA has approved pathogen TMDLs on six streams (140 miles) for pathogens.

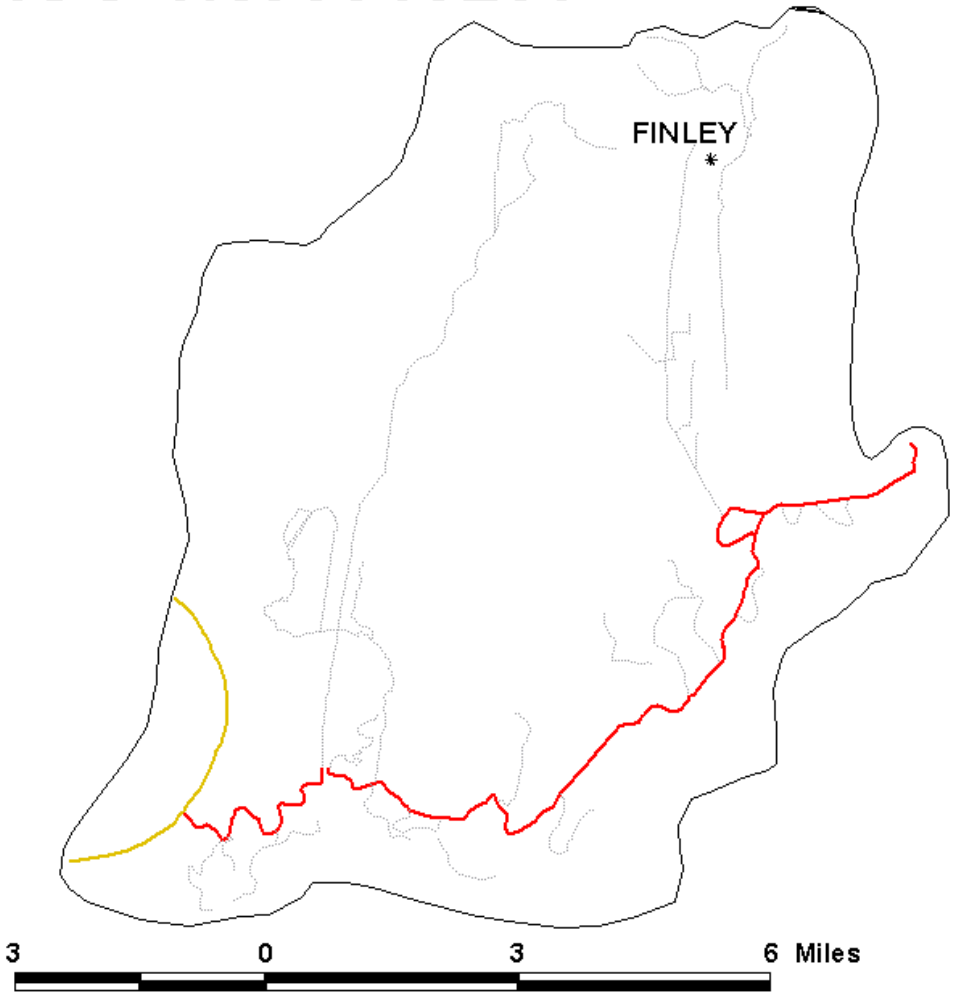
One high quality stream is a subecoregion reference site, Harris Creek in 65e (Southern Plains and Hills).



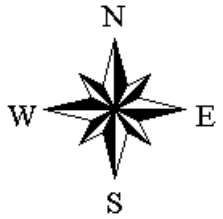
2002 Assessment of Rivers and Streams in South Fork Forked Deer River Watershed

Forked Deer River Watershed
HUC TN08010206





Support status
- Not supporting
- Partially supporting
- Not assessed
- Cities



Forked Deer River Watershed Atlas

HUC Code: **TN08010206**

Counties: Dyer
Lauderdale

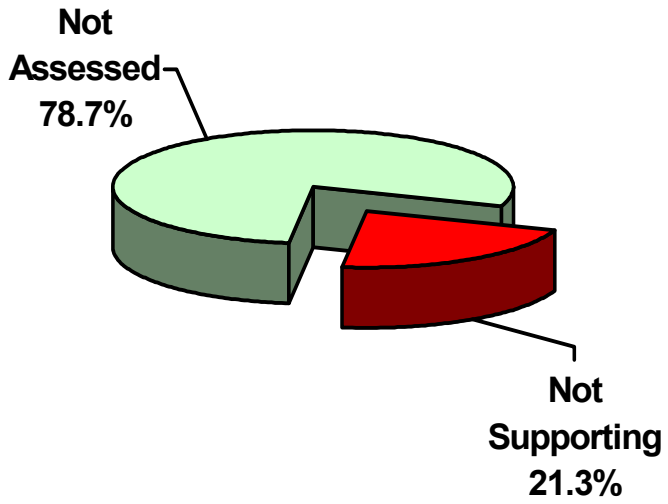
Ecoregions: 73a
74a

Drainage Size of Watershed:	70 square miles
Stream Miles in Watershed:	70.0
Stream Miles Fully Supporting:	0.0
Stream Miles Partially Supporting:	0.0
Stream Miles Not Supporting:	14.9
Stream Miles Not Assessed:	55.1
Lake Acres in Watershed:	None
TDEC Monitoring Stations:	1
Advisories:	None
Watershed Monitoring Group:	2

Surface Water Quality in Forked Deer River Watershed

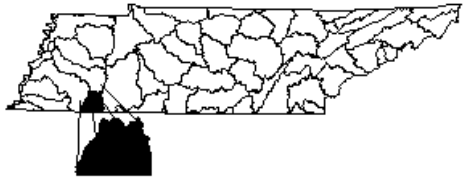
This entire small watershed is in Tennessee. Originally named the Okeena River, the Forked Deer was renamed in the 1780's when surveyors noticed that the branches looked like a deer's forked antlers. The Forked Deer River now flows into the Obion River. Before the earthquakes of 1812, the Forked Deer River had a direct channel that flowed further south to the Mississippi River.

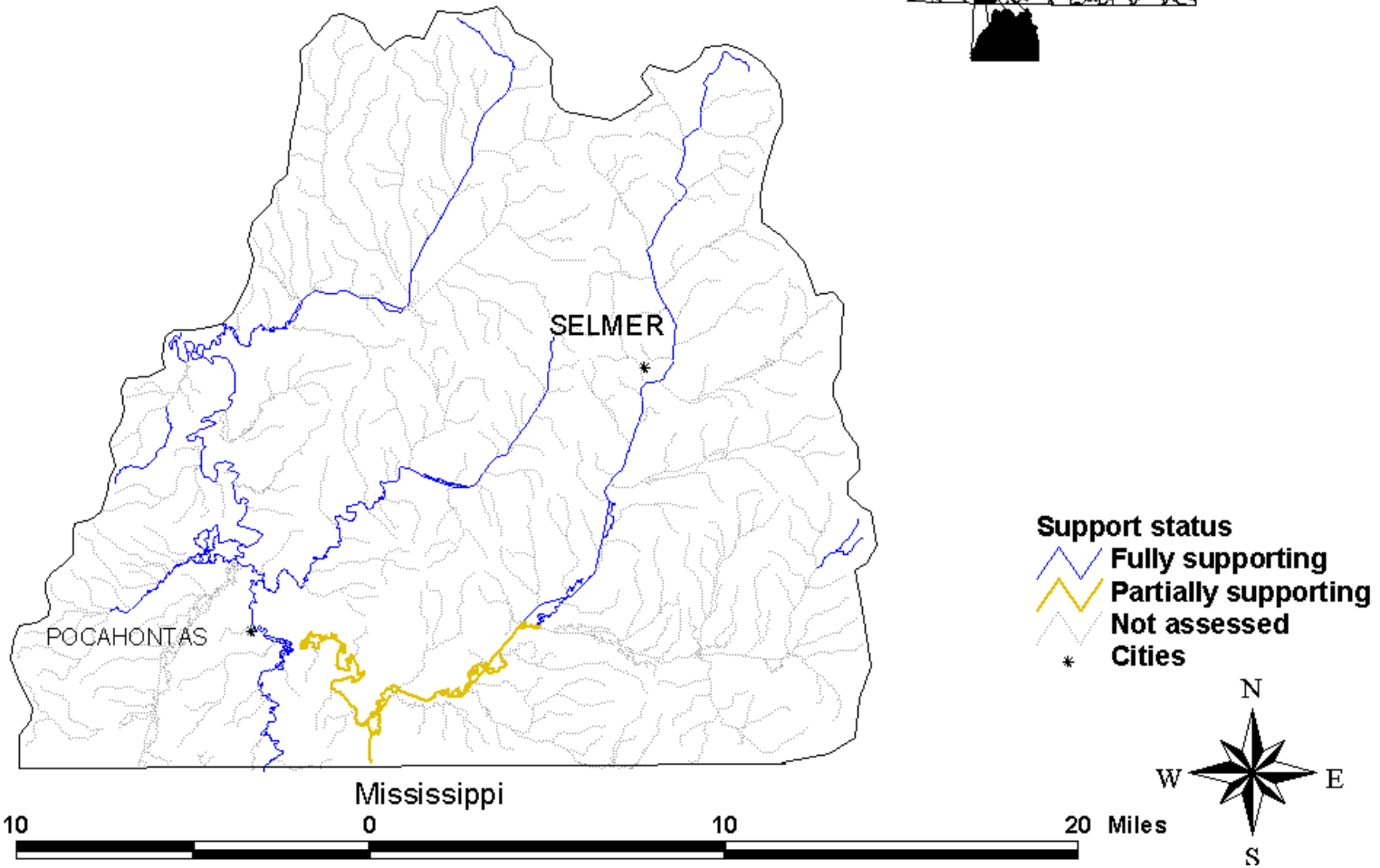
Only one monitoring station is established in this small watershed. This site on the Forked Deer River is impaired due to siltation and habitat alterations from channelization.



2002 Assessment of Rivers and Streams in Forked Deer River Watershed

Upper Hatchie River Watershed
HUC TN08010207





Upper Hatchie River Watershed Atlas

HUC Code: **TN08010207**

Counties: Chester
Hardeman
McNairy

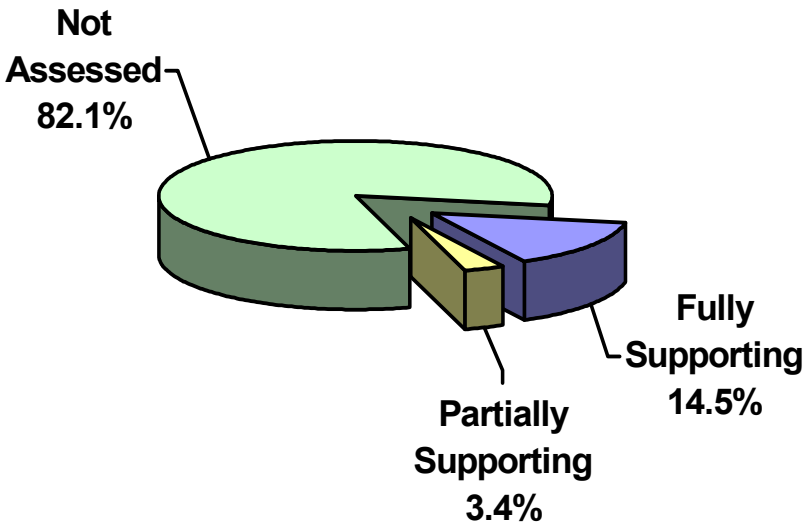
Ecoregions: 65a
65b
65e

Drainage Size of Watershed:	411 square miles
Stream Miles in Watershed:	752.5
Stream Miles Fully Supporting:	108.8
Stream Miles Partially Supporting:	25.6
Stream Miles Not Supporting:	0.0
Stream Miles Not Assessed:	618.1
Lake Acres in Watershed:	None
TDEC Monitoring Stations:	44
Non-TDEC Monitoring Stations:	1
Advisories:	None
Watershed Monitoring Group:	4

Surface Water Quality in Upper Hatchie River Watershed

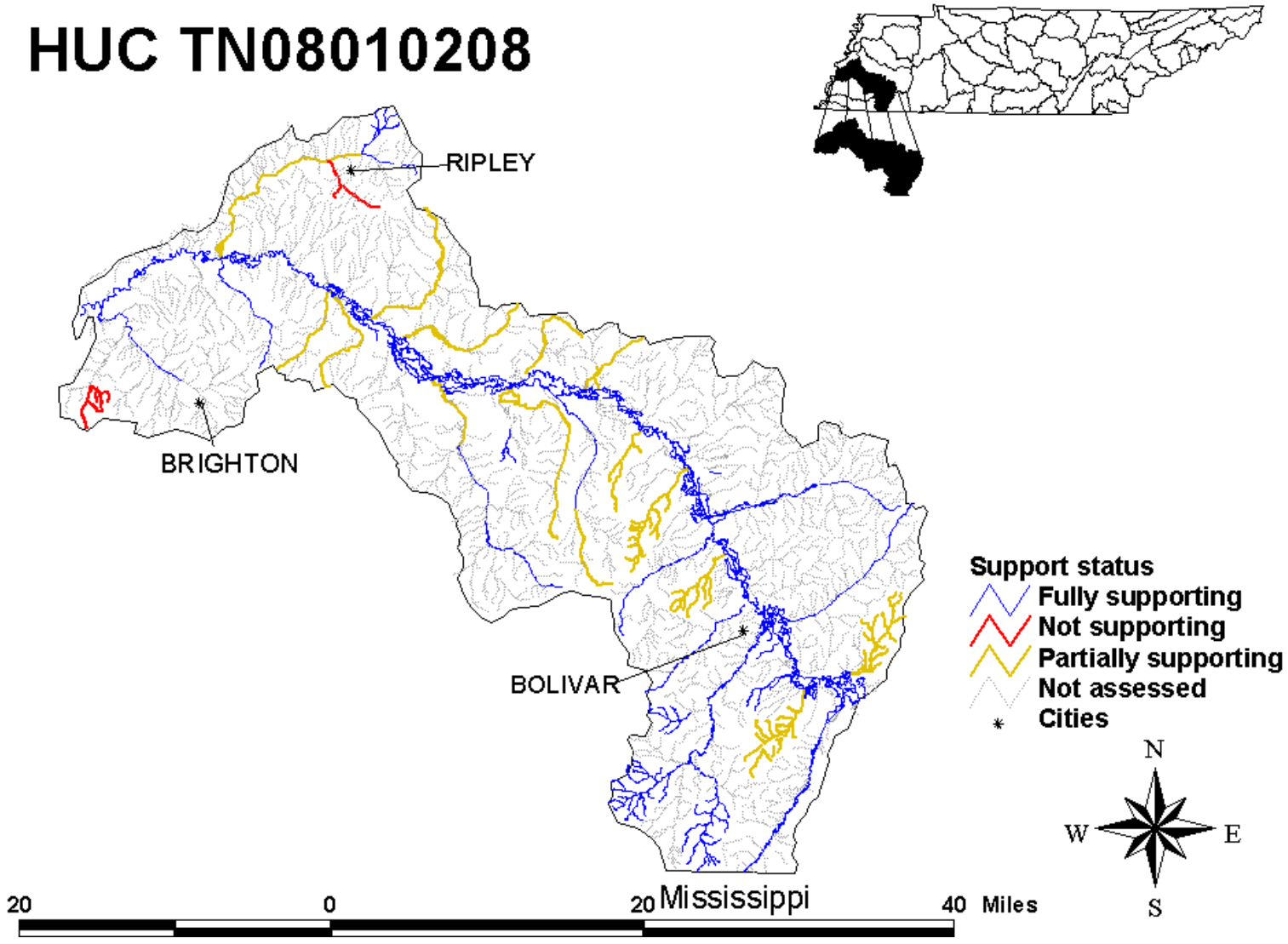
Thirty-six percent of the watershed is in Tennessee with the remainder in Mississippi. This is a rural watershed with small farms the principal land use. Due to a lack of recent data, the majority of this watershed has not been assessed. Eighty-one percent of surveyed streams are fully supporting. Siltation from channelization is the primary pollutant. Nine miles of the Tuscumbia River in Tennessee are impaired by channelization in Mississippi.

Two high quality streams are subecoregion reference sites, Unnamed Tributary to Muddy Creek in 65a (Blackland Prairie) and Cypress Creek in 65b (Flatwood/Alluvial Prairie Margins).



2002 Assessment of Rivers and Streams in Upper Hatchie River Watershed

Lower Hatchie River Watershed
HUC TN08010208



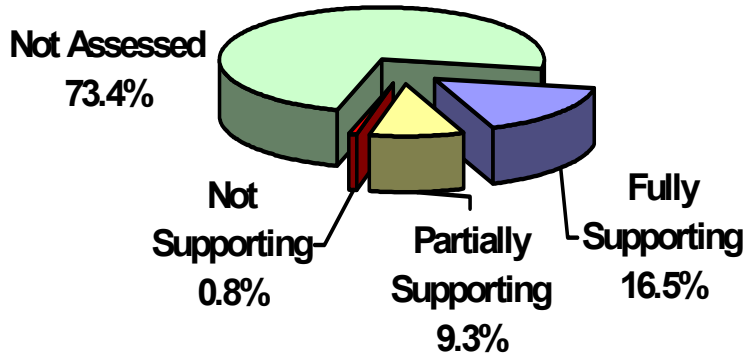
Lower Hatchie River Watershed Atlas

HUC Code:	**TN08010208**	
Counties:	Chester	Fayette
	Hardeman	Haywood
	Lauderdale	Madison
	Tipton	
Ecoregions:	65b	65e
	73a	74a
	74b	
Drainage Size of Watershed:		1430 square miles
Stream Miles in Watershed:		2,530.8
Stream Miles Fully Supporting:		417.8
Stream Miles Partially Supporting:		236.8
Stream Miles Not Supporting:		20.0
Stream Miles Not Assessed:		1,856.2
Lake Acres in Watershed:		None
TDEC Monitoring Stations:		92
Non-TDEC Monitoring Stations:		1
Advisories:		None
Watershed Monitoring Group:		4

Surface Water Quality in Lower Hatchie River Watershed

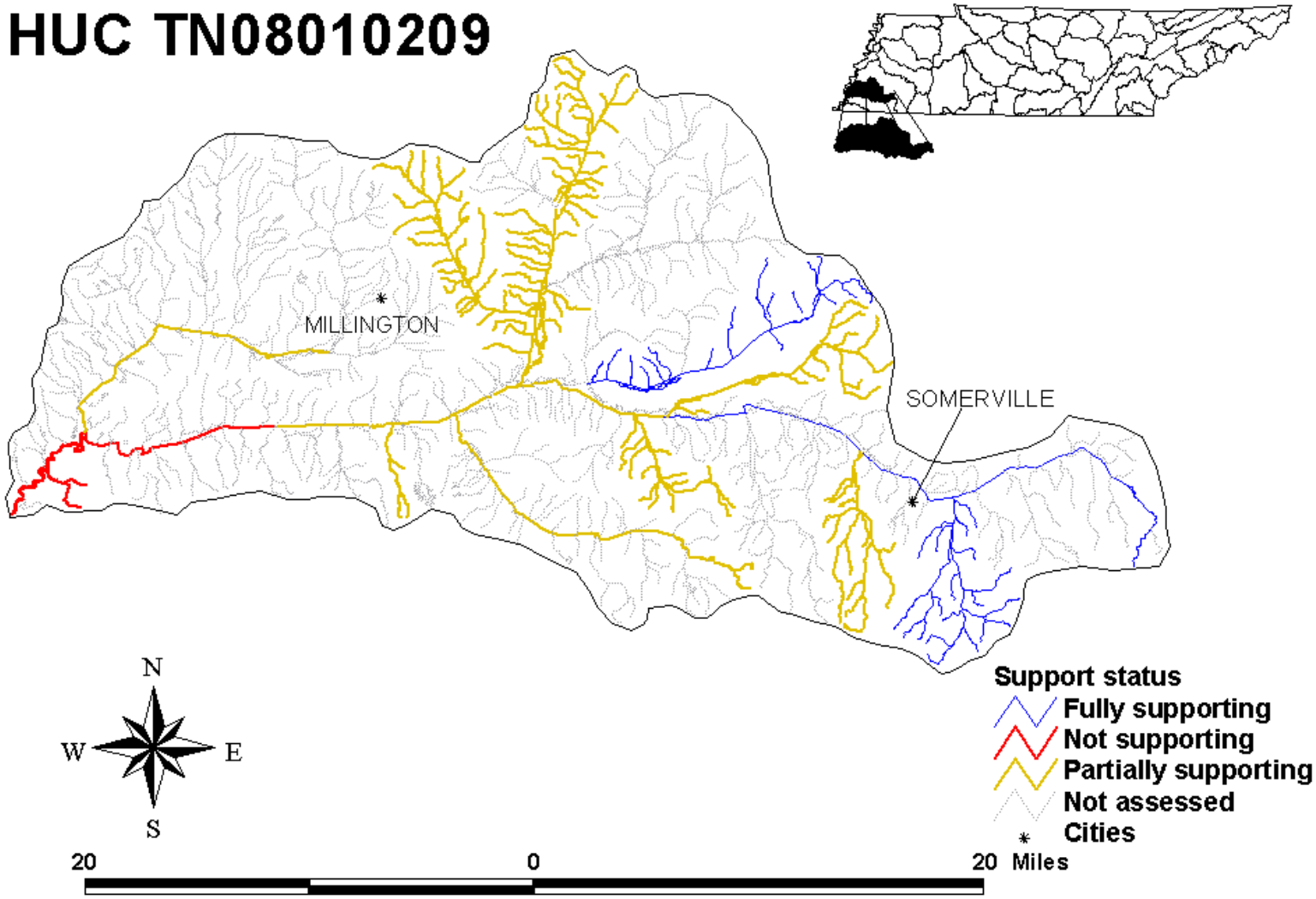
About 98 percent of the watershed is in Tennessee with the remainder in Mississippi. The Hatchie is the last unchannelized river of its type in the lower Mississippi Valley. The river drains a series of wetlands including bottomland hardwoods. Siltation and habitat alteration are a problem due to channelization of many tributaries. The Cane Creek sub-watershed is impaired by industrial pollution and collection system failure. Sixty-two percent of assessed stream are fully supporting. EPA has approved copper TMDLs on three streams (8 miles).

A portion of the Hatchie River is designated as a State Scenic River. Two high quality streams are subecoregion reference sites, Marshall and West Fork Spring Creeks in 65e (Southeastern Plains and Hills).



2002 Assessment of Rivers and Streams in Lower Hatchie River Watershed

Loosahatchie River Watershed
HUC TN08010209



Loosahatchie River Watershed Atlas

HUC Code: **TN08010209**

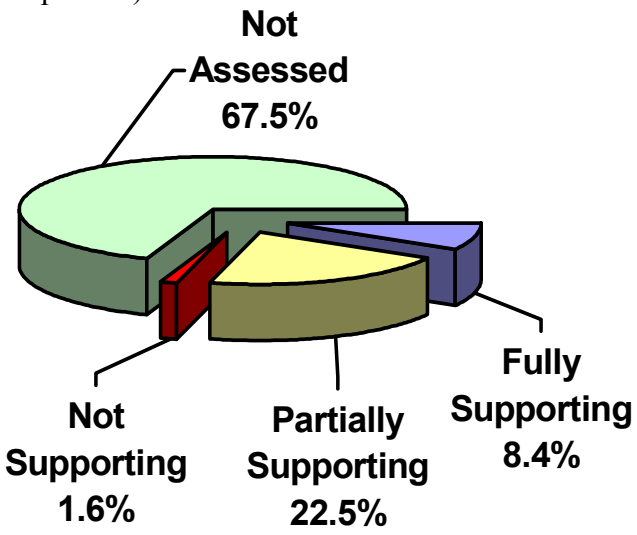
Counties:	Fayette	Hardeman
	Haywood	Shelby
	Tipton	
Ecoregions:	65e	
	73a	
	74a	
	74b	
Drainage Size of Watershed:	738 square miles	
Stream Miles in Watershed:	1,443.4	
Stream Miles Fully Supporting:	121.9	
Stream Miles Partially Supporting:	324.7	
Stream Miles Not Supporting:	23.0	
Stream Miles Not Assessed:	973.8	
Lake Acres in Watershed:	81	
Lake Acres Not Assessed:	81 (100%)	
TDEC Monitoring Stations:	55	
Non-TDEC Monitoring Stations:	6	
Advisories:	None	
Watershed Monitoring Group:	2	

Surface Water Quality in Loosahatchie River Watershed

The entire watershed is in Tennessee. The Loosahatchie River flows into the Mississippi River near Memphis, Tennessee.

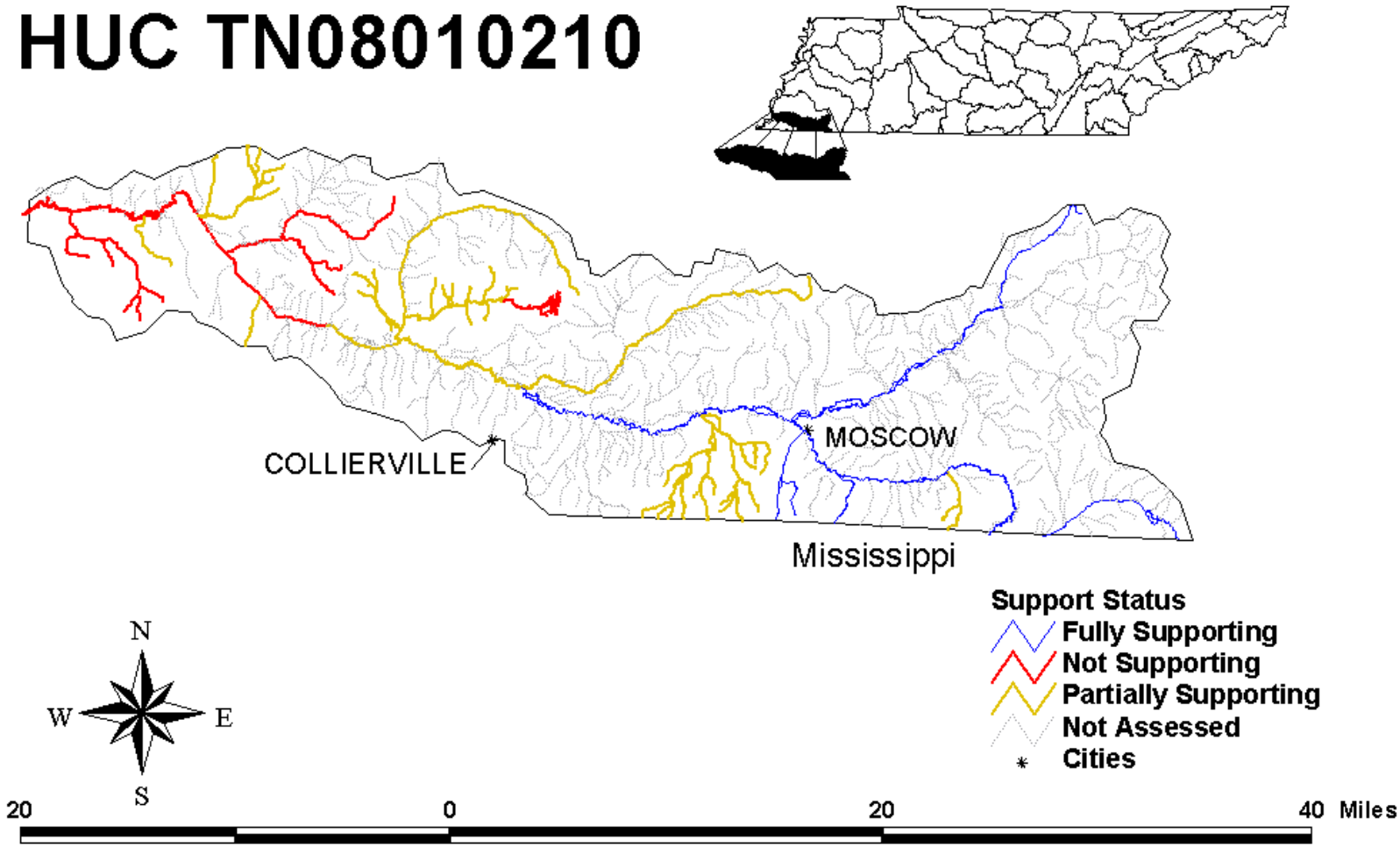
Twenty-six percent of assessed stream miles are fully supporting. Pathogen TMDLs on seven streams (194 miles) have been developed and approved by EPA.

Siltation and habitat alterations are a problem since the river and many of its tributaries have been extensively channelized. The river has a fish tissue advisory from the mouth to Highway 14 for chlordane and other toxic organics from contaminated sediments (Chapter IX).



2002 Assessment of Rivers and Streams in Loosahatchie River Watershed

Wolf River Watershed
HUC TN08010210



Wolf River Watershed Atlas

HUC Code: **TN08010210**

Counties: Fayette
Hardeman
Shelby

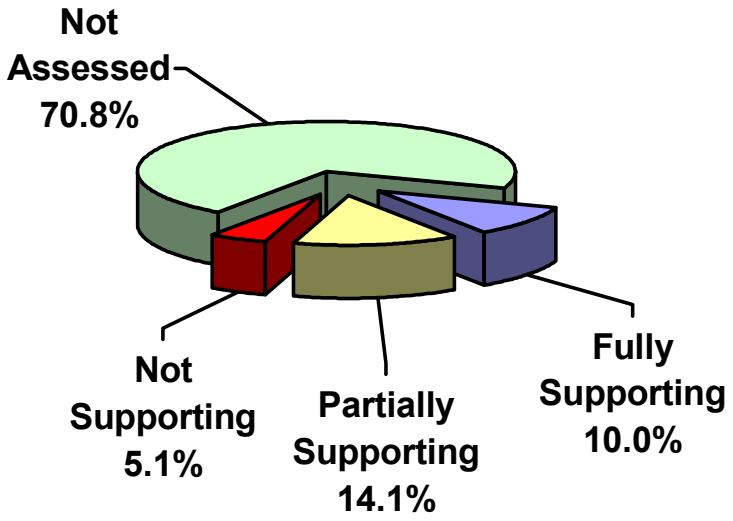
Ecoregions: 65e
73a
74b

Drainage Size of Watershed:	553 square miles
Stream Miles in Watershed:	1,025.2
Stream Miles Fully Supporting:	102.4
Stream Miles Partially Supporting:	144.4
Stream Miles Not Supporting:	52.4
Stream Miles Not Assessed:	726.0
Lake Acres in Watershed:	177
Lake Acres Not Assessed:	177
TDEC Monitoring Stations:	58
Advisories:	1
Watershed Monitoring Group:	3

Surface Water Quality in Wolf River Watershed

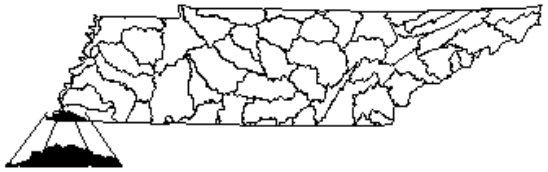
Over 68 percent of the Wolf River Watershed is in Tennessee with the remainder in Mississippi. The Wolf River flows directly into the Mississippi River near Memphis. Thirty-four percent of assessed streams are fully supporting. However, due to a lack of recent data, most of the watershed has not been assessed. Agriculture activities impact the most stream miles with urban runoff and land development major contributors in the downstream portion. The Wolf River has a fish tissue advisory from the mouth to Highway 23 for chlordane and other toxic organics from contaminated substances (Chapter IX).

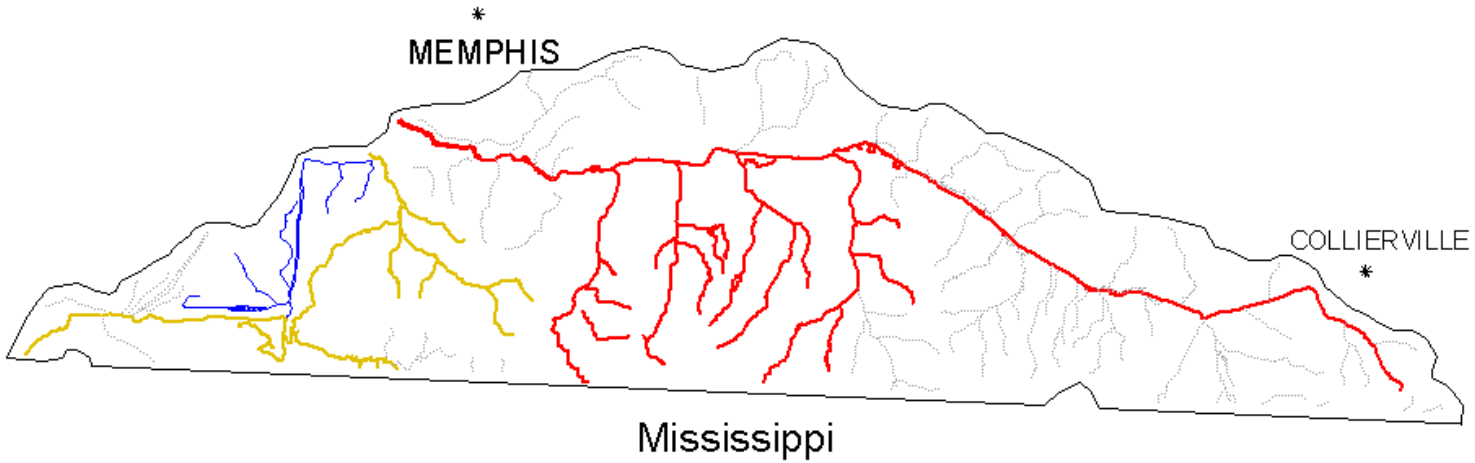
One high quality stream is a subecoregion reference site, Wolf River near the Mississippi state line in 74b (Loess Plains).

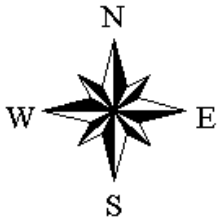


2002 Assessment of Rivers and Streams in Wolf River Watershed

Nonconnah Creek Watershed
HUC TN08010211







Support status
- Fully supporting
- Not supporting
- Partially supporting
- Not assessed
- Cities

10 0 10 20 Miles

Nonconnah Creek Watershed Atlas

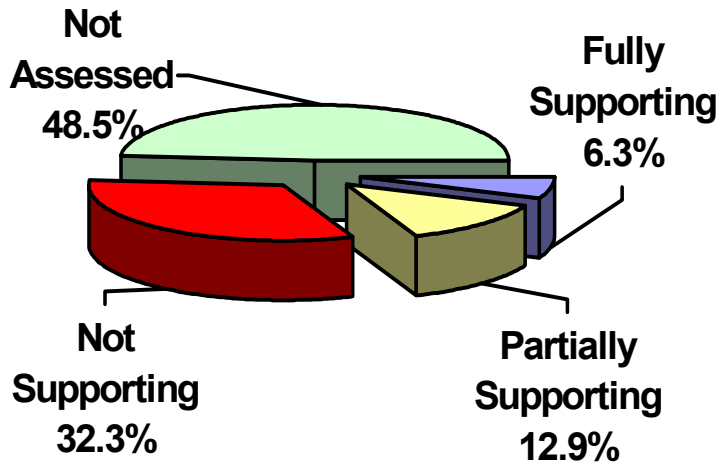
HUC Code:	**TN08010211**
Counties:	Fayette Shelby
Ecoregions:	73a 74a 74b
Drainage Size of Watershed:	184 square miles
Stream Miles in Watershed:	260.4
Stream Miles Fully Supporting:	16.4
Stream Miles Partially Supporting:	33.7
Stream Miles Not Supporting:	84.1
Stream Miles Not Assessed:	126.2
Lake Acres in Watershed:	None
TDEC Monitoring Stations:	24
Advisories:	1
Watershed Monitoring Group:	1

Surface Water Quality in Nonconnah Creek Watershed

Sixty-five percent of the watershed is in Tennessee with the remainder in Mississippi. Nonconnah Creek flows into McKellar Lake before entering the Mississippi River.

The watershed is heavily urbanized. Over half of the watershed has been assessed with only 12 percent fully supporting. Urban runoff, collection system failures and channelization impair the most stream miles. EPA has approved pathogen TMDLs on seven streams (118 miles) listed for pathogens.

Nonconnah Creek has a fish tissue advisory from the mouth to Horn Lake Road Bridge for chlordane and other toxic organic substances (Chapter IX).



2002 Assessment of Rivers and Streams in Nonconnah Creek Watershed